

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/578,402
Source: IFUP
Date Processed by STIC: 5-18-06

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/578,402

CRF Edit Date: 5-18-06
Edited by: KE

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

1 Deleted: / Invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

___ Other:



IFWP

RAW SEQUENCE LISTING

DATE: 05/18/2006

PATENT APPLICATION: US/10/578,402

TIME: 09:57:12

Input Set : A:\PTO.kd.txt

Output Set: N:\CRF4\05182006\J578402.raw

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4 <110> APPLICANT: Laurie H. Glimcher and Mohamed OUKKA
6 <120> TITLE OF INVENTION: METHODS FOR MODULATING AN IMMUNE
7   RESPONSE BY MODULATING KRC ACTIVITY
11 <130> FILE REFERENCE: HUI-045CP2US
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/578,402
C--> 13 <141> CURRENT FILING DATE: 2006-05-03
13 <150> PRIOR APPLICATION NUMBER: PCT/US2004/036641
14 <151> PRIOR FILING DATE: 2004-11-03
16 <150> PRIOR APPLICATION NUMBER: 10/701,401
17 <151> PRIOR FILING DATE: 2003-11-03
19 <150> PRIOR APPLICATION NUMBER: PCT/US2002/14166
20 <151> PRIOR FILING DATE: 2002-05-03
22 <150> PRIOR APPLICATION NUMBER: 60/288,369
23 <151> PRIOR FILING DATE: 2003-05-01
25 <160> NUMBER OF SEQ ID NOS: 8
27 <170> SOFTWARE: FastSEQ for Windows Version 4.0
29 <210> SEQ ID NO: 1
30 <211> LENGTH: 8546
31 <212> TYPE: DNA
32 <213> ORGANISM: Homo sapiens
34 <220> FEATURE:
35 <221> NAME/KEY: CDS
36 <222> LOCATION: (889)...(8106)
38 <400> SEQUENCE: 1
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40 ggaccagttt gccatcccaa ggccgaaggc ctccctccaa cacagttctc caagctctag 120
41 aaatctctga cacatcttga ccatgagacc acggctgggt tttggcagga ttcgaggcac 180
42 aaaccagca gcctcaacct agttcatgga ggagcctcgc ggggtcctgg ccaagcaagc 240
43 ccgccccctt ggtgggaaga gcggcgccct ggtggagggt ggctgccgta ggagtggaca 300
44 tgaatgctgg ctttcagaga gaacagcgtt tcagtttttg tcatcggaag tgggtgcctc 360
45 agcacagaag aagagcgtga tttctcctcc aaggccgttg atctccaacc cagaactaaa 420
46 ggggagaaga gccaccccca gcatccagcg tggcatctct tgtgccagga ccagggatga 480
47 ctgggccatg gacacagatg tctccaacct tcaaccgttt gcatagcaca cgggggactc 540
48 gtgggggcca cctggcactg ccagctgaaa taatacaatg gcaatactga catccttcat 600
49 gacgttttcc cgacagacat tcaggcagaa agtgctgggt cgttttctgt ctgcaaagta 660
50 gaggggccatc gctcaccaat agaatagcgt gggccctgat gacctgctcc gagtcactc 720
51 acagccagtg acacttgcaa aaaactccca aagccgtctt gggtttggtt cccacagctc 780
52 ttgaccaatg tggccaaagc tggacacctc cttgggacac tgggattatt cataaatgca 840
53 gcccgccttg actctccctg aatagcatct gaagtctttg tgaagggtc atg gat cct 897
54                                     Met Asp Pro
55                                     1
57 gaa caa agt gtc aag ggc acc aag aag gct gag gga agt ccc cgg aag 945
58 Glu Gln Ser Val Lys Gly Thr Lys Lys Ala Glu Gly Ser Pro Arg Lys

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59      5      10      15
62 cgg ctg acc aaa gga gag gcc att cag acc agt gtt tct tcc agc gtc 993
63 Arg Leu Thr Lys Gly Glu Ala Ile Gln Thr Ser Val Ser Ser Ser Val
64 20      25      30      35
66 cca tac cca ggc agc ggc aca gct ccg acc caa gag agc ccc gcc caa 1041
67 Pro Tyr Pro Gly Ser Gly Thr Ala Pro Thr Gln Glu Ser Pro Ala Gln
68      40      45      50
70 gag ctc tta gcc ccg cag ccc ttc ccg ggc ccc tca tca gtt ctt agg 1089
71 Glu Leu Leu Ala Pro Gln Pro Phe Pro Gly Pro Ser Ser Val Leu Arg
72      55      60      65
74 gaa ggc tct cag gag aaa acg ggc cag cag cag aag ccc ccc aaa agg 1137
75 Glu Gly Ser Gln Glu Lys Thr Gly Gln Gln Gln Lys Pro Pro Lys Arg
76      70      75      80
78 ccc ccc atc gaa gca tcc gtc cac atc tca cac gtt ccg cag cac cct 1185
79 Pro Pro Ile Glu Ala Ser Val His Ile Ser His Val Pro Gln His Pro
80      85      90      95
82 ctg aca cca gca ttc atg tcg cct ggc aaa cct gag cat ctc ctg gag 1233
83 Leu Thr Pro Ala Phe Met Ser Pro Gly Lys Pro Glu His Leu Leu Glu
84 100      105      110      115
86 ggg tcc aca tgg caa ctg gtt agc ccc atg aga ctc gga ccc tct ggc 1281
87 Gly Ser Thr Trp Gln Leu Val Ser Pro Met Arg Leu Gly Pro Ser Gly
88      120      125      130
90 tcc ttg ctg gcc cct ggg ctc cat cct cag agc cag ctc ctt cct tcc 1329
91 Ser Leu Leu Ala Pro Gly Leu His Pro Gln Ser Gln Leu Leu Pro Ser
92      135      140      145
94 cac gct tcc atc att ccc ccc gag gac ctt cct gga gtc ccc aaa gtc 1377
95 His Ala Ser Ile Ile Pro Pro Glu Asp Leu Pro Gly Val Pro Lys Val
96      150      155      160
98 ttc gtg cct cgt cct tcc cag gtc tcc ttg aag ccc aca gaa gag gca 1425
99 Phe Val Pro Arg Pro Ser Gln Val Ser Leu Lys Pro Thr Glu Glu Ala
100      165      170      175
102 cac aag aag gag agg aag ccc cag aag cca ggc aag tac atc tgc cag 1473
103 His Lys Lys Glu Arg Lys Pro Gln Lys Pro Gly Lys Tyr Ile Cys Gln
104 180      185      190      195
106 tac tgc agc cgg ccc tgt gcc aag ccc agc gtg ctc cag aag cac att 1521
107 Tyr Cys Ser Arg Pro Cys Ala Lys Pro Ser Val Leu Gln Lys His Ile
108      200      205      210
110 cgc tca cac aca ggt gag agg ccc tac ccc tgc ggc ccc tgt ggc ttc 1569
111 Arg Ser His Thr Gly Glu Arg Pro Tyr Pro Cys Gly Pro Cys Gly Phe
112      215      220      225
114 tcc ttc aag acc aag agt aat ctc tac aag cac agg aag tcc cat gcc 1617
115 Ser Phe Lys Thr Lys Ser Asn Leu Tyr Lys His Arg Lys Ser His Ala
116      230      235      240
118 cac cgc atc aaa gca ggc ctg gcc tca ggc atg ggt ggc gag atg tac 1665
119 His Arg Ile Lys Ala Gly Leu Ala Ser Gly Met Gly Gly Glu Met Tyr
120      245      250      255
122 cca cat ggg ctg gag atg gag cgg atc cct ggg gaa gag ttt gag gag 1713
123 Pro His Gly Leu Glu Met Glu Arg Ile Pro Gly Glu Glu Phe Glu Glu
124 260      265      270      275

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126	ccc	act	gag	gga	gaa	agc	aca	gat	tct	gaa	gag	gag	act	agt	gcc	acc	1761
127	Pro	Thr	Glu	Gly	Glu	Ser	Thr	Asp	Ser	Glu	Glu	Glu	Thr	Ser	Ala	Thr	
128					280					285					290		
130	tct	ggt	cac	cct	gca	gag	ctc	tcc	cca	aga	ccc	aag	cag	ccc	ctt	ctc	1809
131	Ser	Gly	His	Pro	Ala	Glu	Leu	Ser	Pro	Arg	Pro	Lys	Gln	Pro	Leu	Leu	
132				295					300					305			
134	tcc	agc	ggg	cta	tac	agc	tct	ggg	agc	cac	agt	tcc	agc	cac	gaa	cgc	1857
135	Ser	Ser	Gly	Leu	Tyr	Ser	Ser	Gly	Ser	His	Ser	Ser	Ser	His	Glu	Arg	
136			310					315					320				
138	tgt	tcc	ctg	tcc	cag	tcc	agc	aca	gcc	cag	tca	ctc	gaa	gac	ccc	cct	1905
139	Cys	Ser	Leu	Ser	Gln	Ser	Ser	Thr	Ala	Gln	Ser	Leu	Glu	Asp	Pro	Pro	
140		325					330					335					
142	cca	ttt	gtg	gaa	ccc	tca	tct	gag	cac	ccc	ctg	agc	cat	aaa	cct	gaa	1953
143	Pro	Phe	Val	Glu	Pro	Ser	Ser	Glu	His	Pro	Leu	Ser	His	Lys	Pro	Glu	
144	340					345				350					355		
146	gac	acc	cac	acg	att	aag	cag	aag	ctg	gcc	ctc	cgc	tta	agc	gag	agg	2001
147	Asp	Thr	His	Thr	Ile	Lys	Gln	Lys	Leu	Ala	Leu	Arg	Leu	Ser	Glu	Arg	
148				360					365						370		
150	aag	aag	gtg	atc	gat	gag	cag	gcg	ttt	ctg	agc	cca	ggc	agc	aaa	ggg	2049
151	Lys	Lys	Val	Ile	Asp	Glu	Gln	Ala	Phe	Leu	Ser	Pro	Gly	Ser	Lys	Gly	
152			375					380					385				
154	agt	act	gag	tct	ggg	tat	ttc	tct	cgc	tcc	gag	agt	gca	gag	cag	cag	2097
155	Ser	Thr	Glu	Ser	Gly	Tyr	Phe	Ser	Arg	Ser	Glu	Ser	Ala	Glu	Gln	Gln	
156			390					395					400				
158	gtc	agc	ccc	cca	aac	acc	aac	gcc	aag	tcc	tac	gct	gag	atc	atc	ttt	2145
159	Val	Ser	Pro	Pro	Asn	Thr	Asn	Ala	Lys	Ser	Tyr	Ala	Glu	Ile	Ile	Phe	
160		405					410					415					
162	ggc	aag	tgt	ggg	cga	ata	gga	cag	cgg	acc	gcc	atg	ctg	aca	gcc	acc	2193
163	Gly	Lys	Cys	Gly	Arg	Ile	Gly	Gln	Arg	Thr	Ala	Met	Leu	Thr	Ala	Thr	
164	420					425				430					435		
166	tcc	acc	cag	ccc	ctc	ctg	ccc	ctc	tcc	acc	gaa	gac	aag	ccc	agc	ctg	2241
167	Ser	Thr	Gln	Pro	Leu	Leu	Pro	Leu	Ser	Thr	Glu	Asp	Lys	Pro	Ser	Leu	
168				440					445						450		
170	gtg	cct	ttg	tct	gta	ccc	cgg	acg	cag	gtg	atc	gag	cac	atc	acg	aag	2289
171	Val	Pro	Leu	Ser	Val	Pro	Arg	Thr	Gln	Val	Ile	Glu	His	Ile	Thr	Lys	
172				455					460					465			
174	ctc	atc	acc	atc	aac	gag	gcc	gtg	gtg	gac	acc	agt	gag	atc	gac	agc	2337
175	Leu	Ile	Thr	Ile	Asn	Glu	Ala	Val	Val	Asp	Thr	Ser	Glu	Ile	Asp	Ser	
176			470					475					480				
180	gtg	aag	cca	agg	cgg	agc	tca	ctg	tcc	agg	cgc	agc	agc	atg	gag	tcc	2385
181	Val	Lys	Pro	Arg	Arg	Ser	Ser	Leu	Ser	Arg	Arg	Ser	Ser	Met	Glu	Ser	
182		485						490					495				
184	cca	aaa	tcc	agc	ctc	tac	cgg	gag	ccc	ctg	tca	tcc	cac	agt	gag	aaa	2433
185	Pro	Lys	Ser	Ser	Leu	Tyr	Arg	Glu	Pro	Leu	Ser	Ser	His	Ser	Glu	Lys	
186	500					505				510					515		
188	acc	aag	cct	gaa	caa	tca	ctg	ctg	agc	ctc	cag	cac	ccg	ccc	agt	acc	2481
189	Thr	Lys	Pro	Glu	Gln	Ser	Leu	Leu	Ser	Leu	Gln	His	Pro	Pro	Ser	Thr	
190				520						525					530		
192	gcc	ccc	cct	gtg	cct	ctc	ctg	aga	agc	cac	tca	atg	cct	tct	gcc	gcc	2529

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Input Set : A:\PTO.kd.txt

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193	Ala	Pro	Pro	Val	Pro	Leu	Leu	Arg	Ser	His	Ser	Met	Pro	Ser	Ala	Ala	
194				535					540					545			
196	tgc	act	atc	agc	acc	ccc	cac	cac	ccc	ttc	cga	ggt	agc	tac	tcc	ttc	2577
197	Cys	Thr	Ile	Ser	Thr	Pro	His	His	Pro	Phe	Arg	Gly	Ser	Tyr	Ser	Phe	
198			550					555					560				
200	gat	gac	cat	atc	acc	gac	tcc	gaa	gcc	ctg	agc	cgc	agc	agt	cac	gtg	2625
201	Asp	Asp	His	Ile	Thr	Asp	Ser	Glu	Ala	Leu	Ser	Arg	Ser	Ser	His	Val	
202		565					570					575					
204	ttt	acc	tcc	cac	ccc	cgg	atg	ctg	aag	ccg	cag	ccg	gca	atc	gaa	tta	2673
205	Phe	Thr	Ser	His	Pro	Arg	Met	Leu	Lys	Pro	Gln	Pro	Ala	Ile	Glu	Leu	
206	580					585				590						595	
208	cct	ttg	gga	ggg	gaa	tac	agt	tct	gag	gag	cct	ggc	cca	agc	agc	aaa	2721
209	Pro	Leu	Gly	Gly	Glu	Tyr	Ser	Ser	Glu	Glu	Pro	Gly	Pro	Ser	Ser	Lys	
210				600					605					610			
212	gac	aca	gcc	tcc	aag	ccc	tcg	gac	gaa	gtg	gaa	ccc	aag	gaa	agc	gag	2769
213	Asp	Thr	Ala	Ser	Lys	Pro	Ser	Asp	Glu	Val	Glu	Pro	Lys	Glu	Ser	Glu	
214				615					620					625			
216	ctt	acc	aaa	aag	acc	aag	aag	ggt	ttg	aaa	aca	aaa	ggg	gtg	atc	tac	2817
217	Leu	Thr	Lys	Lys	Thr	Lys	Lys	Gly	Leu	Lys	Thr	Lys	Gly	Val	Ile	Tyr	
218			630					635					640				
220	gaa	tgt	aac	ata	tgt	ggt	gct	cgg	tac	aag	aaa	agg	gat	aac	tac	gaa	2865
221	Glu	Cys	Asn	Ile	Cys	Gly	Ala	Arg	Tyr	Lys	Lys	Arg	Asp	Asn	Tyr	Glu	
222		645				650					655						
224	gcc	cac	aaa	aaa	tac	tac	tgc	tca	gag	ctt	cag	atc	gca	aag	ccc	atc	2913
225	Ala	His	Lys	Lys	Tyr	Tyr	Cys	Ser	Glu	Leu	Gln	Ile	Ala	Lys	Pro	Ile	
226	660					665				670						675	
228	tct	gca	ggc	acc	cac	aca	tct	cca	gaa	gct	gaa	aag	agt	cag	att	gag	2961
229	Ser	Ala	Gly	Thr	His	Thr	Ser	Pro	Glu	Ala	Glu	Lys	Ser	Gln	Ile	Glu	
230				680					685					690			
232	cat	gag	ccg	tgg	tcc	caa	atg	atg	cat	tac	aaa	ctg	gga	acc	acc	ctg	3009
233	His	Glu	Pro	Trp	Ser	Gln	Met	Met	His	Tyr	Lys	Leu	Gly	Thr	Thr	Leu	
234				695					700					705			
236	gaa	ctc	act	cca	ctg	agg	aag	agg	agg	aaa	gag	aag	agc	ctt	ggg	gac	3057
237	Glu	Leu	Thr	Pro	Leu	Arg	Lys	Arg	Arg	Lys	Glu	Lys	Ser	Leu	Gly	Asp	
238			710					715					720				
240	gag	gaa	gag	cca	cct	gcc	ttt	gag	tcc	aca	aaa	agt	cag	ttt	ggc	agc	3105
241	Glu	Glu	Glu	Pro	Pro	Ala	Phe	Glu	Ser	Thr	Lys	Ser	Gln	Phe	Gly	Ser	
242		725				730					735						
244	ccc	ggg	cca	tct	gat	gct	gct	cgg	aac	ctt	ccc	ctg	gag	tcc	acc	aag	3153
245	Pro	Gly	Pro	Ser	Asp	Ala	Ala	Arg	Asn	Leu	Pro	Leu	Glu	Ser	Thr	Lys	
246	740					745				750						755	
248	tca	cca	gca	gaa	cca	agt	aaa	tca	gtg	ccc	tcc	ttg	gag	gga	ccc	acg	3201
249	Ser	Pro	Ala	Glu	Pro	Ser	Lys	Ser	Val	Pro	Ser	Leu	Glu	Gly	Pro	Thr	
250				760					765					770			
252	ggc	ttc	cag	cca	agg	act	ccc	aag	cca	ggg	tcc	ggt	tca	gaa	tca	ggg	3249
253	Gly	Phe	Gln	Pro	Arg	Thr	Pro	Lys	Pro	Gly	Ser	Gly	Ser	Glu	Ser	Gly	
254				775				780						785			
256	aag	gag	agg	aga	aca	acg	tcc	aaa	gaa	att	tct	gtc	atc	cag	cac	acc	3297
257	Lys	Glu	Arg	Arg	Thr	Thr	Ser	Lys	Glu	Ile	Ser	Val	Ile	Gln	His	Thr	

RAW SEQUENCE LISTING

DATE: 05/18/2006

PATENT APPLICATION: US/10/578,402

TIME: 09:57:13

Input Set : A:\PTO.kd.txt

Output Set: N:\CRF4\05182006\J578402.raw

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260	agc tcc ttt gag aaa tct gat tct ctc gag cag ccg agt ggc ttg gaa	3345		
261	Ser Ser Phe Glu Lys Ser Asp Ser Leu Glu Gln Pro Ser Gly Leu Glu			
262	805	810	815	
264	ggg gaa gac aaa cct ctg gcc cag ttc cca tca ccc cca cct gcc cca	3393		
265	Gly Glu Asp Lys Pro Leu Ala Gln Phe Pro Ser Pro Pro Pro Ala Pro			
266	820	825	830	835
268	cac gga cgc tct gct cac tcc ctg cag cct aag ttg gtc cgc cag ccc	3441		
269	His Gly Arg Ser Ala His Ser Leu Gln Pro Lys Leu Val Arg Gln Pro			
270	840	845	850	
272	aac att cag gtt cct gag atc cta gta act gag gag cct gac cgg ccg	3489		
273	Asn Ile Gln Val Pro Glu Ile Leu Val Thr Glu Glu Pro Asp Arg Pro			
274	855	860	865	
276	gac aca gag cca gag ccg ccc cct aag gaa cct gag aag act gag gag	3537		
277	Asp Thr Glu Pro Glu Pro Pro Pro Lys Glu Pro Glu Lys Thr Glu Glu			
278	870	875	880	
280	ttc caa tgg ccc cag cgc agc cag aca ctt gcc cag ctc cca gct gag	3585		
281	Phe Gln Trp Pro Gln Arg Ser Gln Thr Leu Ala Gln Leu Pro Ala Glu			
282	885	890	895	
284	aag gct cca ccc aaa aag aag agg ttg cgc ctg gca gag atg gcc caa	3633		
285	Lys Ala Pro Pro Lys Lys Lys Arg Leu Arg Leu Ala Glu Met Ala Gln			
286	900	905	910	915
288	tca tca ggg gag tcc agc ttc gag tcc tct gtg cct ctg tct cgc agc	3681		
289	Ser Ser Gly Glu Ser Ser Phe Glu Ser Ser Val Pro Leu Ser Arg Ser			
290	920	925	930	
292	ccg agc cag gaa agc aat gtc tct ttg agt ggg tcc agc cgc tca gcc	3729		
293	Pro Ser Gln Glu Ser Asn Val Ser Leu Ser Gly Ser Ser Arg Ser Ala			
294	935	940	945	
298	tcg ttt gag agg gat gac cat ggg aaa gcc gag gcc ccc gat ccc tca	3777		
299	Ser Phe Glu Arg Asp Asp His Gly Lys Ala Glu Ala Pro Asp Pro Ser			
300	950	955	960	
302	tct gac atg cgc ccc aaa ccc ctg ggc acc cac atg ttg act gtc ccc	3825		
303	Ser Asp Met Arg Pro Lys Pro Leu Gly Thr His Met Leu Thr Val Pro			
304	965	970	975	
306	agc cac cac cca cat gcc cga gag atg cgg agg tca gcc tca gag cag	3873		
307	Ser His His Pro His Ala Arg Glu Met Arg Arg Ser Ala Ser Glu Gln			
308	980	985	990	995
310	agc ccc aac gtt tcc cat tct gcc cac atg acc gag aca cgc agc aaa	3921		
311	Ser Pro Asn Val Ser His Ser Ala His Met Thr Glu Thr Arg Ser Lys			
312	1000	1005	1010	
314	tcc ttt gac tat ggc agc ttg tcc ttg aca ggc cct tct gct cca gcc	3969		
315	Ser Phe Asp Tyr Gly Ser Leu Ser Leu Thr Gly Pro Ser Ala Pro Ala			
316	1015	1020	1025	
318	cca gtg gct cca cca gcc ggg gag gcc ccg cca gag aga aga aaa tgc	4017		
319	Pro Val Ala Pro Pro Ala Gly Glu Ala Pro Pro Glu Arg Arg Lys Cys			
320	1030	1035	1040	
322	ttc ttg gtg aga agc ccc tct ctg agc agg cct cca gaa tct gag ttg	4065		
323	Phe Leu Val Arg Ser Pro Ser Leu Ser Arg Pro Pro Glu Ser Glu Leu			
324	1045	1050	1055	

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/578,402

DATE: 05/18/2006

TIME: 09:57:14

Input Set : A:\PTO.kd.txt

Output Set: N:\CRF4\05182006\J578402.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

Raw Sequence Listing before editing (for reference only)



IFWP

RAW SEQUENCE LISTING

DATE: 05/15/2006

PATENT APPLICATION: US/10/578,402

TIME: 10:01:30

Input Set : A:\SEQLIST.TXT

Output Set: N:\CRF4\05152006\J578402.raw

4 <110> APPLICANT: Laurie H. Glimcher and Mohamed OUKKA
 6 <120> TITLE OF INVENTION: METHODS FOR MODULATING AN IMMUNE
 7 RESPONSE BY MODULATING KRC ACTIVITY
 11 <130> FILE REFERENCE: HUI-045CP2US
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/578,402
 C--> 13 <141> CURRENT FILING DATE: 2006-05-03
 13 <150> PRIOR APPLICATION NUMBER: PCT/US2004/036641
 14 <151> PRIOR FILING DATE: 2004-11-03
 16 <150> PRIOR APPLICATION NUMBER: 10/701,401
 17 <151> PRIOR FILING DATE: 2003-11-03
 19 <150> PRIOR APPLICATION NUMBER: PCT/US2002/14166
 20 <151> PRIOR FILING DATE: 2002-05-03
 22 <150> PRIOR APPLICATION NUMBER: 60/288,369
 23 <151> PRIOR FILING DATE: 2003-05-01
 25 <160> NUMBER OF SEQ ID NOS: 8
 27 <170> SOFTWARE: FastSEQ for Windows Version 4.0

Does Not Comply
 Corrected Diskette Needed
 (pg. 3)

ERRORED SEQUENCES

1156 <210> SEQ ID NO: 8
 1157 <211> LENGTH: 786
 1158 <212> TYPE: PRT
 1159 <213> ORGANISM: Homo sapiens
 1161 <400> SEQUENCE: 8
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 1163 1 5 10 15
 1164 Pro Pro Leu Pro His Pro Ala Leu Ser His Gly Gln Ala Pro Gly Ser
 1165 20 25 30
 1166 Glu Ala Leu Lys Glu Tyr Pro Gln Pro Ser Gly Lys Pro His Arg Arg
 1167 35 40 45
 1168 Gly Leu Thr Pro Leu Ser Val Lys Lys Glu Asp Ser Lys Glu Gln Pro
 1169 50 55 60
 1170 Asp Leu Pro Ser Leu Ala Pro Pro Ser Ser Leu Pro Leu Ser Glu Thr
 1171 65 70 75 80
 1172 Ser Ser Arg Pro Ala Lys Ser Gln Glu Gly Thr Asp Ser Lys Lys Val
 1173 85 90 95
 1174 Leu Gln Phe Pro Ser Leu His Thr Thr Thr Asn Val Ser Trp Cys Tyr
 1175 100 105 110
 1176 Leu Asn Tyr Ile Lys Pro Asn His Ile Gln His Ala Asp Arg Arg Ser
 1177 115 120 125
 1178 Ser Val Tyr Ala Gly Trp Cys Ile Ser Leu Tyr Asn Pro Asn Leu Pro
 1179 130 135 140

RAW SEQUENCE LISTING

DATE: 05/15/2006

PATENT APPLICATION: US/10/578,402

TIME: 10:01:30

Input Set : A:\SEQLIST.TXT

Output Set: N:\CRF4\05152006\J578402.raw

```

1180 Gly Val Ser Thr Lys Ala Ala Leu Ser Leu Leu Arg Ser Lys Gln Lys
1181 145 150 155 160
1183 Val Ser Lys Glu Thr Tyr Thr Met Ala Thr Ala Pro His Pro Glu Ala
1184 165 170 175
1185 Gly Arg Leu Val Pro Ser Ser Ser Arg Lys Pro Arg Met Thr Glu Val
1186 180 185 190
1187 His Leu Pro Ser Leu Val Ser Pro Gly Gln Lys Asp Leu Ala Arg
1188 195 200 205
1189 Val Glu Lys Glu Glu Glu Arg Arg Gly Glu Pro Glu Glu Asp Ala Pro
1190 210 215 220
1191 Ala Ser Gln Arg Gly Glu Pro Ala Arg Ile Lys Ile Phe Glu Gly Gly
1192 225 230 235 240
1193 Tyr Lys Ser Asn Glu Glu Tyr Val Tyr Val Arg Gly Arg Gly Arg Gly
1194 245 250 255
1195 Lys Tyr Val Cys Glu Glu Cys Gly Ile Arg Cys Lys Lys Pro Ser Met
1196 260 265 270
1197 Leu Lys Lys His Ile Arg Thr His Thr Asp Val Arg Pro Tyr Val Cys
1198 275 280 285
1199 Lys His Cys His Phe Ala Phe Lys Thr Lys Gly Asn Leu Thr Lys His
1200 290 295 300
1201 Met Lys Ser Lys Ala His Ser Lys Lys Cys Gln Glu Thr Gly Val Leu
1202 305 310 315 320
1203 Glu Glu Leu Glu Ala Glu Glu Gly Thr Ser Asp Asp Leu Phe Gln Asp
1204 325 330 335
1205 Ser Glu Gly Arg Glu Gly Ser Glu Ala Val Glu Glu His Gln Phe Ser
1206 340 345 350
1207 Asp Leu Glu Asp Ser Asp Ser Asp Ser Asp Leu Asp Glu Asp Glu Asp
1208 355 360 365
1209 Glu Asp Glu Glu Glu Ser Gln Asp Glu Leu Ser Arg Pro Ser Ser Glu
1210 370 375 380
1211 Ala Pro Pro Pro Gly Pro Pro His Ala Leu Arg Ala Asp Ser Ser Pro
1212 385 390 395 400
1213 Ile Leu Gly Pro Gln Pro Pro Asp Ala Pro Ala Ser Gly Thr Glu Ala
1214 405 410 415
1215 Thr Arg Gly Ser Ser Val Ser Glu Ala Glu Arg Leu Thr Ala Ser Ser
1216 420 425 430
1217 Cys Ser Met Ser Ser Gln Ser Met Pro Gly Leu Pro Trp Leu Gly Pro
1218 435 440 445
1219 Ala Pro Leu Gly Ser Val Glu Lys Asp Thr Gly Ser Ala Leu Ser Tyr
1220 450 455 460
1221 Lys Pro Val Ser Pro Arg Arg Pro Trp Ser Pro Ser Lys Glu Ala Gly
1222 465 470 475 480
1223 Ser Arg Pro Pro Leu Ala Arg Lys His Ser Leu Thr Lys Asn Asp Ser
1224 485 490 495
1225 Ser Pro Gln Arg Cys Ser Pro Ala Arg Glu Pro Gln Ala Ser Ala Pro
1226 500 505 510
1227 Ser Pro Pro Gly Leu His Val Asp Pro Gly Arg Gly Met Gly Pro Leu
1228 515 520 525
1229 Pro Cys Gly Ser Pro Arg Leu Gln Leu Ser Pro Leu Thr Leu Cys Pro

```

RAW SEQUENCE LISTING

DATE: 05/15/2006

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Input Set : A:\SEQLIST.TXT

Output Set : N:\CRF4\05152006\J578402.raw

```

1230      530      535      540
1231 Leu Gly Arg Glu Leu Ala Pro Arg Ala His Val Leu Ser Lys Leu Glu
1232 545      550      555      560
1233 Gly Thr Thr Asp Pro Gly Leu Pro Arg Tyr Ser Pro Thr Arg Arg Trp
1234      565      570      575
1235 Ser Pro Gly Gln Ala Glu Ser Pro Pro Arg Ser Ala Pro Pro Gly Lys
1236      580      585      590
1237 Trp Ala Leu Ala Gly Pro Gly Ser Pro Ser Ala Gly Glu His Gly Pro
1238      595      600      605
1239 Gly Leu Gly Leu Ala Pro Arg Val Leu Phe Pro Pro Ala Pro Leu Pro
1240      610      615      620
1242 His Lys Leu Leu Ser Arg Ser Pro Glu Thr Cys Ala Ser Pro Trp Gln
1243 625      630      635      640
1244 Lys Ala Glu Ser Arg Ser Pro Ser Cys Ser Pro Gly Pro Ala His Pro
1245      645      650      655
1246 Leu Ser Ser Arg Pro Phe Ser Ala Leu His Asp Phe His Gly His Ile
1247      660      665      670
1248 Leu Ala Arg Thr Glu Glu Asn Ile Phe Ser His Leu Pro Leu His Ser
1249      675      680      685
1250 Gln His Leu Thr Arg Ala Pro Cys Pro Leu Ile Pro Ile Gly Gly Ile
1251      690      695      700
1252 Gln Met Val Gln Ala Arg Pro Gly Ala His Pro Thr Leu Leu Pro Gly
1253 705      710      715      720
1254 Pro Thr Ala Ala Trp Val Ser Gly Phe Ser Gly Gly Gly Ser Asp Leu
1255      725      730      735
1256 Thr Gly Ala Arg Glu Ala Gln Glu Arg Gly Arg Trp Ser Pro Thr Glu
1257      740      745      750
1258 Ser Ser Ser Ala Ser Val Ser Pro Val Ala Lys Val Ser Lys Phe Thr
1259      755      760      765
1260 Leu Ser Ser Glu Leu Glu Gly Arg Asp Tyr Pro Lys Glu Arg Glu Arg
1261      770      775      780
1262 Thr Gly
1263 785
E--> 1265 HUI-045CP2US
E--> 1272 2

```

deleted

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/578,402

DATE: 05/15/2006

TIME: 10:01:31

Input Set : A:\SEQLIST.TXT

Output Set: N:\CRF4\05152006\J578402.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1265 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:1265 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
L:1272 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:8
L:1272 M:252 E: No. of Seq. differs, <211> LENGTH:Input:786 Found:787 SEQ:8